CHAPTER 8

ARMS CONTROL AFTER THE COLD WAR

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The years from 1989 to 2000 saw many changes in American defense and strategic posture. During this time, the Soviet Union disintegrated, ending the bipolar era that had so clarified the international environment. This made arms control much more complex. Technology diffusion continued, so it became more realistic to be concerned about a missile attack from many states around the world. Worse than mere missiles, nuclear weapons technology diffused as well. Both India and Pakistan revealed their nuclear weapons, the advanced state of a secret Iraqi program became apparent after their defeat in 1991, and concerns remained about North Korean and Iranian nuclear progress.

THEMES

This chapter, and the following one by Forrest Waller, describes the major arms control themes of the George Bush and Bill Clinton presidencies. The first theme is strategic arms reductions. This continues the story Charles Dusch began in chapter 6, as Ronald Reagan began negotiations on a Strategic Arms Reduction Treaty (START). By the end of the Bush presidency, both a START and START II agreement had been signed—although eight years after that, START II was not in effect.

The second theme, and the one that runs most steadily throughout the period, is missile defense. Bush made a strong effort to modify the Anti-Ballistic Missile (ABM) Treaty before he left office, so defenses could be built to meet the threats of a non-bipolar world. The Clinton Administration, operating under the premise that theater defense was both more urgent and more feasible than strategic defense, spent his first term and part of his second trying to distinguish between strategic and theater defense. The results of this effort, which have not been ratified, were minimal. This second theme began to be transformed at the end of the Clinton presidency, as the launch of longer-range missiles by both North Korea and Iran increased the rationale for national missile defense.

The third theme during this period, and the major focus of the Clinton presidency in particular, was non-proliferation. Non-proliferation included a variety of programs designed to safeguard the Russian nuclear arsenal and prevent the spread of its technology. Even theater missile defense was seen

as contributing to this goal. Non-proliferation efforts also included multilateral restrictions on weapons of mass destruction. The Nuclear Non-Proliferation Treaty (NPT) was indefinitely extended. A Comprehensive Test Ban Treaty (CTBT) for nuclear weapons was signed. The Chemical Weapons Convention (CWC), signed in the last week of the Bush presidency, received Senate consent. The Clinton team also worked on compliance provisions to the 1975 Biological and Toxin Weapons Convention (BWC).

Once again, however—and this is the highest-level theme we find throughout this chapter—many of these agreements languish, along with START II and the ABM demarcations. CTBT was rejected by the Senate and no compliance protocol has been completed for the BWC. Of all the negotiations and agreements since the end of the Cold War, only START I, Conventional Forces in Europe (CFE), the NPT extension, and the CWC have been ratified and put in force. Most of these were achievements of the Bush years—the Clinton Administration negotiated only the NPT extension.

Before moving on to a chronological review of arms control activity, which sets the stage for the topical treatment, a note about methods and sources for this chapter. To a much greater extent than in prior chapters, the interviewees continue to work for the US government. Many of these interviewees, as the price for candor, did not wish to have their names associated with specific comments in this chapter. So each section begins with a citation of the people who contributed information, but no statements of opinion are cited specifically in the text. The narrative combines the results of all these interviews into what the author considers the most persuasive version of events.

Arms Control Environment I: Decline of the Cold War

For one year, 1989, the Bush Administration faced the same external environment as its predecessors, and arms control proceeded as it had before. The focus was on a single adversary, the Soviet Union. And "adversary" is the correct word—despite glasnost and perestroika, there was little trust between the sides, especially with respect to Soviet intentions. President Mikhail Gorbachev used the rhetoric of peace, yet his military continued to modernize its air and strategic forces. Regional concerns, at this time, did not make it onto the agenda.

In 1989 the START talks continued, at the same slow pace they had under Reagan. The negotiators continued to search for ways to enhance stability by minimizing the attractiveness of a first strike. Both sides sought to build up their own forces while negotiating, and to find ways to lock in

their own advantages. In parallel, the Bush Administration tried without success to get the Soviets to accept its broad interpretation of the ABM treaty, which would allow space-based interceptors.

Arms Control Environment II: End of the Cold War (1990-92)

By 1992 the bilateral relationship had changed dramatically. In late 1989 all the Soviet satellite regimes of Eastern Europe fell, as did Berlin's concrete symbol of bipolarity. Germany reunified, the Warsaw Treaty Organization was dissolved, and Soviet/Russian forces began to withdraw from their foreign bases. Gorbachev's posture during the Gulf War, abandoning his Iraqi client, demonstrated the potential for what Bush called a "new world order." The Gulf War also demonstrated that regional threats must be addressed. While Saddam Hussein's forces were defeated with relative ease, the danger posed by even his primitive ballistic missiles was sobering to defense planners. Subsequent revelations about Iraqi nuclear, biological, and chemical weapons programs would broaden the focus of arms control.

For the meantime, the Bush Administration worked to codify the new reality, and the new sense of cooperation with the Soviets.² The first breakthrough was the CFE treaty, signed during Operation Desert Shield on 19 November 1990. CFE will not be described in detail later in this chapter, since it is non-strategic and has been mostly overtaken by subsequent events. It created limits on numbers of tanks, artillery, armored combat vehicles, combat helicopters, and attack aircraft within countries and subregions. A later protocol, signed in July 1992, set limits on personnel.³ CFE entered into force in November 1992.⁴ The CFE Treaty did serve the purpose of arms control by allowing both sides to reduce their defense expenditures, making war less likely through transparency and inspections, and reducing the destructiveness of a conventional war. While the agreement seems less urgent after the Cold War than it had previously, it did provide a way to lock in the reductions that had been made, and to ensure that they would be reciprocal.⁵ The same rationale would underlie the START II agreement.

CFE was paired with the Open Skies verification agreement, signed on 24 March 1992, which also largely falls outside the scope of this book. Open Skies required its adherents to "permit frequent, unrestricted overflights of their national territories by foreign aircraft for the purpose of increasing confidence about military intentions and capabilities."

START I was signed on 31 July 1991, and arms control began to accelerate. Within a few months, both Bush and Gorbachev announced

unilateral steps to reduce nuclear tensions. When the Soviet Union collapsed at the end of the year, Russian President Boris Yeltsin proved to be an even more willing partner in arms control. Less than 18 months after START I was signed, it had been amended on 3 January 1993 by the deeper reductions of START II, in which the United States achieved much of what it had failed to achieve in the first agreement. START I was also amended by the Lisbon Protocol of 23 May 1992, which planned for the nuclear disarmament of the former Soviet republics that found themselves in possession of part of the former Soviet arsenal. By the end of Bush's term, the United States, Russia, and Kazakhstan had ratified START I.

Arms Control Environment III: Adjusting to the New World (1993-1997)

Significant political changes affected arms control in 1993. Bill Clinton, whose team brought a different emphasis on arms control, succeeded President Bush. While President Yeltsin remained in office, parties opposed to him, including former Communists, would now dominate the Russian parliament, the Duma. The Russian approach to arms control returned to more suspicion and hard bargaining, as they regarded recent agreements as very unfavorable to them. President Clinton, on the other hand, changed the focus to non-proliferation and regional issues now that the strategic problems seemed to be resolved.

Nevertheless, work continued on many fronts of arms control. START I went into force on 5 Dec 94 with Ukraine's accession to the Lisbon Protocol. As for other legacies of the Bush Administration, the United States ratified Open Skies in 1994 and START II in 1996. On 17 November 1995, the Russians and Americans reached agreement to modify CFE's flank limits to account for the collapse of the Soviet Union. In the most protracted arms control initiative of the Clinton years, four years of talks resulted in the New York Agreements of 26 September 1997. These were designed to demark differences between theater and strategic defense systems.

With respect to non-proliferation, the Clinton Administration promoted both bilateral and multilateral measures. The United States worked with the Russians to control their nuclear stockpile via the Nunn-Lugar Cooperative Threat Reduction (CTR) program. In May 1995, an indefinite extension to the NPT was accepted, without weakening its provisions. A CTBT was negotiated in the following year, and signed by the United States on 24 September 1996. While the CWC had been completed on 3 September 1992

and signed on 13 January 1993 under the Bush Administration, the Clinton White House succeeded in winning Senate consent on 25 April 1997.

Arms Control Environment IV: The End of Arms Control? (1998-2000)

For all the activity of the first five years of the Clinton presidency, however, the results were superficial. The New York Agreements on missile defense may have been the centerpiece of the efforts on traditional arms control, but they were never sent to the Senate for its consent. The Duma had declined to ratify START II for so long that a START II extension was included in New York. When Russia finally ratified START II in 2000, seven years after its signing and four years after the US Senate had initially consented to it, their approval was conditioned on US ratification of the New York Agreements. In part, this was a tactical ploy to continue to link missile defense to strategic arms reductions, but it also was a necessity: the United States had ratified a treaty whose deadlines had passed, so the Russians needed the US to ratify the extension as well.

As for non-proliferation, the Clinton years did not produce an acceptable compliance text for the BWC. The Senate rejected the CTBT in 1999, although a testing moratorium remained in place. The Nunn-Lugar CTR program faced continuing budget battles, and its success has been difficult to evaluate. Meanwhile, the Russian war in Chechnya appears to violate the terms of CFE—although CFE was never intended to address a civil war in Russia. While Open Skies verification was ratified by the Duma in 2001, after President Clinton left office, it was by this time no longer clear what that meant.

Nevertheless, there is another side to these perceived "failures" of the Clinton Administration. In a non-bipolar world, the focus of arms control becomes less clear. Arms control may help prevent war in an adversarial relationship, but no major state is clearly an adversary of the United States. With the chance of war with Russia reduced already, there is less incentive for a strategic arms build-up. Thus one can limit defense costs unilaterally. Those states that are adversaries—Iraq, for example—do not appear to be good candidates for traditional arms negotiations. In this situation, ambiguity with regard to limits on missile defense systems may be wise. More typically, arms control efforts have entered a multilateral arena. Given the difficulty two states had during the Cold War in assessing what agreements would serve their interests, it is not surprising that progress on multilateral regimes is difficult.

STRATEGIC ARMS REDUCTION¹¹

Chapter 6 described the basic rationale behind the START talks during the Reagan Administration. For the first time, the goal of arms control was first strike stability—weapons would survive a first strike but could not themselves disarm the other side. ¹² To achieve this goal, ballistic missiles, especially those with multiple independently-targetable re-entry vehicles (MIRVs), should be reduced in favor of slower platforms like cruise missiles and manned bombers. ¹³ START also sought a more comprehensive verification regime than prior agreements. ¹⁴ While these principles fit a solid, neutral theory of arms control, they also tended to reinforce areas of American superiority and require cuts in areas of Soviet superiority. Thus the two sides remained far from agreement when President Bush took office. The new National Security Advisor, Brent Scowcroft, called a brief pause for a strategic review in early 1989, before negotiations resumed. ¹⁵

START I

The most contentious issue facing the American team in 1989 was whether or not they should continue to demand a ban on mobile missiles. The Office of the Secretary of Defense (OSD) position, backed by the Joint Chiefs of Staff (JCS) and also by the Arms Control and Disarmament Agency (ACDA), was that the United States should press for a ban. Mere limits on such systems would be difficult to verify with certainty, and they had a rapid-reload potential not present in other systems. The State Department, on the other hand, wanted to drop the proposal, since it was becoming apparent that it was a roadblock to reaching any agreement. Bush's National Security Council (NSC) was less enthusiastic about the ban as well, noting that mobile missiles were not as destabilizing a first-strike weapons as fixed MIRVed intercontinental ballistic missiles (ICBMs). In many ways, they played a similar role to the American submarine-launched ballistic missiles (SLBMs).

Along with the overall ban, OSD advanced the strategy used successfully with the Ground-Launched Cruise Missile (GLCM) in the Intermediate Nuclear Forces (INF) treaty—continue to build our own mobile systems so as to exercise leverage on the Soviets. This proved untenable. By late 1989, it became clear that Congress was unwilling to fund American mobile systems if they would only be bargaining chips. Furthermore, the long delay in developing an American counter to the Soviets' development of the mobile SS-24 and SS-25 meant that the Soviets

were being asked to actually dismantle a deployed system to offset a potential American system.¹⁷

All agencies came to realize that the mobile missile ban must be dropped. The ban was "traded" for a 50% cut in deployed Soviet heavy ICBM warheads, to 1,540 (10 MIRVs on 154 missiles), and a limit of 1,100 on deployed mobile ICBM warheads. This would allow the Soviets to continue deploying mobile ICBMs. The Americans could do so as well, but did not have either mobile or heavy ICBMs deployed. The balancing American advantage was that both sides faced a limit of 4,900 total accountable ICBM and SLBM warheads.

Another obstacle to completing START was how to count bomber weapons. Both sides agreed with the general principle that bombers were less destabilizing than ICBMs, and so the potential weapons load from a bomber should be discounted in arriving at the total of 6,000 accountable warheads. Furthermore, the bombers should be discounted in compensation for Soviet air defenses. This issue can be dealt with more briefly, as by 1989 there was no major interagency dispute over bomber discounts. One key sticking point was how one would distinguish between conventional and nuclear-armed bombers; another was the status of the Tacit Rainbow, a conventional air-launched cruise missile (ALCM). In the agreement signed on 31 July 1991, penetrating bombers were counted as a single warhead, and stand-off cruise missile bombers were counted as 10 warheads for the United States and eight for the Soviet Union. In each case, this was half of the actual load these aircraft could deliver. ¹⁹

Unilateral Initiatives

START's signature was followed in the next month by a failed coup against Gorbachev. With the Cold War clearly collapsing, President Bush announced a series of unilateral initiatives on 27 September 1991. These included withdrawing all naval tactical nuclear weapons and nuclear artillery shells, taking all heavy bombers and 450 Minuteman II ICBMs off alert, and canceling the Short-Range Attack Missile (SRAM II), small ICBM mobile basing, and Peacekeeper rail garrison. One week later, on 5 October, Gorbachev matched this unilateral initiative with respect to tactical nuclear weapons. Furthermore, he cancelled equivalent programs for new and modernized mobile ICBMs and the Soviet short-range attack missile. Gorbachev also withdrew nuclear air defense warheads and nuclear mines, took 503 ICBMs and six ballistic missile submarines off alert status, and restricted Soviet rail-mobile ICBMs to garrison.

A second unilateral round occurred in early 1992. During his State of the Union Address on 28 January, Bush limited B-2 production to 20, Advanced Cruise Missiles to 640, cancelled the small ICBM, and stopped production of both the Peacekeeper and Trident II warheads. The next day, Russian President Yeltsin announced accelerated compliance with START cuts, an end to production of the Blackjack and Bear-H heavy bombers, an end to ALCM and sea-launched cruise missile (SLCM) production, and 50% cuts in air-launched tactical nuclear weapons. While these initiatives would remain unilateral, additional proposals contained within them would become the basis for START II negotiations.²⁰

START II

Prior to START II talks beginning, loose ends from the Soviet breakup remained to be resolved. Parts of the Soviet arsenal were dispersed in Belarus, Ukraine, and Kazakhstan. On 23 May 1992, the non-Russian republics agreed in the Lisbon Protocol to be parties to START and also to become non-nuclear signatories to the NPT. By the end of the year, all but Ukraine and Belarus had ratified START (the US Senate consented in October). Russian ratification was contingent on the others, however, and Ukraine did not agree to the NPT provisions until November 1994. In the interim, they obtained a 14 January 1994 trilateral agreement with the United States and Russia which gave them compensation and security assistance. This allowed START I to enter into force on 5 December 1994. 22

With respect to START II itself, the primary arms control goal was no longer crisis stability. Instead, the goals were economic. The DoD wanted to cut strategic forces if it could, so Bush's team sought to ensure that the Russians would match these cuts.²³ With arms control no longer central to the bilateral relationship, a START II agreement represented an insurance policy against a return to bipolarity.²⁴ As befit such a low-stress diplomatic environment, the basic goals of START II were simply announced at a 17 June 1992 summit. Within six months, a small, high-level group (in contrast to the multitude present at Geneva for START I) had set the stage for Bush and Yeltsin to sign START II on 3 Jan 93.²⁵

In START II, the United States achieved most of the goals it had set for the original START. Central to this was a ban on land-based MIRVed ICBMs altogether. START II also lowered the total deployed strategic warhead ceiling to between 3,000 and 3,500 for each side. Cruise missiles would be counted as their actual totals, rather than being discounted 50% as in START I. The cuts would occur in two phases: by 2000, total deployed

warheads would drop to between 3,800 and 4,250, MIRVs to 1,200, and SLBMs to 2,160. The final phase, by 2003, would eliminate MIRVs and lower the SLBM sublimit to between 1,700 and 1,750. Since START II was simply a modification to START I's numbers, the verification regime remained unchanged.²⁶ The only major item not written into START II was a mobile ICBM ban, but this was no longer a priority.

Unfortunately, the very speed of the negotiations—one member of the team said that "every word" was written in December 1992—may have contributed to the long delay in ratifying START II. The return of the former Communist Party to control of the Duma was accompanied by suspicions that the United States had forced a bad agreement on a desperate, or inept, Yeltsin. While the US Senate consented to START II on 26 January 1996, the Duma continued to link START II ratification to side issues like ABM demarcation. The Republican Congress, in response, prohibited the DoD from cutting nuclear forces beyond the START I limits until Russia ratified the treaty, since if US cuts were completed, the Duma would have no incentive to do so.

Despite the delay in ratification, interest in further cuts was maintained. At the Helsinki summit of March 1997, Clinton and Yeltsin set goals for START III of reducing warheads to the 2,000-2,500 range. This position was repeated at Cologne in June 1999.²⁷ At Helsinki, the two presidents also agreed to stretch out the START II deadlines by four years, to 2007. This modification to START II was rolled into the New York Agreements described in the following section.²⁸ The Duma finally ratified START II on 14 April 2000, but its ratification was conditioned on the deadline extension from Helsinki. Since the Senate has not consented to this—in fact, has not even been sent the extension for consideration, the eight Clinton years ended with START II still not in force.

Summary of Strategic Arms Reduction

The first four years of strategic arms negotiations cannot be considered anything but a success. The Bush Administration completed the tasks left it by the Reagan administration, and more. Deployed strategic warheads would be reduced by over two-thirds from their 1990 levels, which were in excess of 10,000 on each side. The most destabilizing weapons, the MIRVed ICBMs, would be eliminated by both sides. All development and modernization of new strategic forces had ended, thus fully containing the arms race's costs.

The following eight years are more difficult to assess, in part because we have no historical perspective on them. Neither the Russians nor the

Americans have violated the terms of the unilateral initiatives or START II. On the other hand, either side may renounce the unratified treaty and do so. During the Clinton years, strategic arms control moved from the central current of foreign policy to a side eddy. Duma ratification did not seem to be a priority of the Clinton Administration; on the other hand, the United States had more important issues against which to exert its minimal leverage. The next two sections of this chapter describe the new arms control themes, missile defense and non-proliferation.

MISSILE DEFENSE³⁰

During the Bush and Clinton Administrations, the emphasis placed on missile defense systems and on the ABM Treaty varied over time. During the first years of the Bush Administration, the Reagan-era Strategic Defense Initiative (SDI) continued, as described in Chapter 6. This included the so-called "broad interpretation" of the ABM Treaty, based on the idea that if the treaty did not explicitly prohibit space-based components, then testing and perhaps even deploying them would not violate the treaty.

The Gulf War demonstrated to the United States that other states besides the Soviet Union posed a potential ballistic missile danger. Accordingly, programs were initiated to address Theater Missile Defense (TMD). These programs continued after the inauguration of President Clinton, even after he announced in 1993 that the space-based portion of SDI would be abandoned, and the narrow interpretation of the ABM Treaty followed. Since the treaty did not define "strategic missile," a four-year set of negotiations followed, resulting in the New York Agreements. These established the successor states to the ABM Treaty, made an initial effort to distinguish between strategic and theater defense systems, and enshrined the "narrow interpretation" by prohibiting space-based interceptors. The Clinton Administration never submitted the New York Agreements to the Senate for its advice and consent.

In the following year, North Korea's three-stage missile demonstration changed the terms of the debate once again. It became apparent that theater weapons would not be sufficient to meet all short-term threats and that research and development of a National Missile Defense (NMD) system might be appropriate after all. This led to a renewed look at changing the terms of the ABM treaty, an effort that did not net any progress by the end of the Clinton Administration.

SDI: 1989-1993

During 1989, the primary public concern of the Department of Defense was its perception of a "gap" in strategic defense efforts by the Soviets and Americans. At the August 1989 ABM Treaty review in Geneva, Americans emphasized the apparent violations to the treaty posed by the phased-array radar at Krasnoyarsk and additional radars at Gomel. These were not directed at the perimeter of the Soviet Union, as required by the ABM treaty, and thus could become part of a strategic defense targeting system. In parallel to these concerns, the Defense and Space Talks proposed by President Reagan at the Washington Summit began in 1989.³¹

These talks, like all the missile defense negotiations during the Bush Administration, were conducted outside the ABM Treaty's Standing Consultative Committee (SCC). Very little was accomplished during the formal Defense and Space Talks. They were initially demanded by the Russians as a way of linking the START and INF negotiations to restrictions on the SDI.³² It remains unclear how much either side expected to gain from the discussions, since neither was open to compromise as long as the Cold War strategic framework remained. In any case, once the START I agreements were signed in 1991, the Soviets ended the parallel Defense and Space Talks.

By this time, however, the Bush Administration's perception of the threat from ballistic missiles had changed radically. The experience with SCUD-hunting in the Gulf War demonstrated a serious deficiency in American military capabilities. For the first time since the Korean War, an adversary inflicted American casualties via aerial attack. The Patriot missile, originally the SAM-D, could not carry out the anti-missile mission adequately because it had been designed specifically to remain compliant to the ABM Treaty. Furthermore, the break-up of the Soviet Bloc and the beginnings of the break-up of the Soviet Union changed the nature of the threat from that source: a massive intentional attack now seemed unlikely, but an accidental or unauthorized one was now a realistic fear. The August 1991 coup attempt in the Soviet Union only added to the fear that the Soviet arsenal was no longer as secure as it had been. Deterrence, after all, was designed to work against a "rational, unitary actor," and it was not clear that Iraq, North Korea, or even now the Soviet Union fit that definition. 33

To meet this danger, the Strategic Defense Initiative Office (SDIO) proposed developing and deploying a system called Global Protection Against Limited Strikes (GPALS). The minimal GPALS, intended to comply with the ABM Treaty's limits, would have used 200 interceptors operating from a single ground base or submarine.³⁴ This size was designed

to meet the likely danger from any newly nuclear state, or from a single ballistic missile submarine. A larger version of GPALS was also recommended, which would have increased the system to six bases.³⁵ Both versions envisioned using space-based sensors for early warning and tracking.³⁶

In parallel to this effort, the Bush Administration began a more serious attempt to convince the Soviets to revise the ABM treaty. On September 27, 1991, President Bush publicly asked the Soviets to "join us in taking immediate, concrete steps to permit the limited deployment of non-nuclear defenses to protect against limited ballistic missile strikes whatever their source."³⁷ The response from President Gorbachev a week later was very positive—accepting the invitation and suggesting that they investigate developing joint missile warning systems. Six-party discussions began on 27 November 1991, with representatives of the four nuclear-armed Soviet republics sitting with the Soviet and American delegations. The United States proposed a new interim agreement that would have lifted the ABM Treaty's limits on development and testing and permitted deployment of a small dispersed missile defense system. The new agreement would have still limited the number of sites, interceptors, and number of interceptors at each installation, so as to ensure that it would only be capable of defending against a limited strike.³⁸

While the Soviet Union itself would only survive for another month, this ABM revision was encouraged even more strongly by Russian President Yeltsin. In late January 1992, he called for a Global Protection System (GPS) that would defend against missile strikes worldwide and would integrate Russian, American, and other development efforts. After working to win the acceptance of his NATO allies, Bush agreed to the plan at his 17 June 1992 summit with Yeltsin. Their joint statement said, "Such cooperation would be a tangible expression of the new relationship that exists between Russia and the United States." The initial priorities would be to share early warning information via a joint early warning center, to encourage the participation of many states in developing and deploying the technology, and to revise or establish the legal framework governing ballistic missile defense. One of the key treaty revisions would be to lift restrictions on sensors, since no territorial defense could otherwise be successful under the ABM regime.

These talks aimed at moving the Russian-American relationship into one founded on normal interstate relations, rather than one governed by Mutual Assured Destruction. The Americans were hopeful for an agreement, since Russia was geographically more vulnerable to the dangers of ballistic missile proliferation than the United States was. While the tone

of the negotiations was cooperative, the American position was made clear to the Russians: If an agreement could not be reached on limited defensive systems, then the United States would "consider withdrawal, legally in accordance with the provisions of the Treaty."

While the Bush Administration pursued these agreements for several months, until his re-election defeat in November 1992, their wisdom was not universally accepted within the government. ACDA was particularly skeptical of the joint aspects of GPS. There would be practical problems with sharing command, control, and communications data as well as technical data with the Russians; in the past the Department of Defense had been reluctant to share such information even with allies. Furthermore, once implemented, it was likely that American systems would be protecting Russia more often than the reverse, creating a built-in burden-sharing problem.

TMD and ABM Demarcation – 1993-1997

With the inauguration of the President Clinton in the United States, and the weakening of Yeltsin's power in Russia following the Duma elections, the focus on strategic defense ended. The Clinton Administration did not find the need for missile defense to be worth risking START II, which was still being held up in Russia. 42 On 13 May 93, the new Secretary of Defense, Les Aspin, signaled this new focus on Theater Missile Defense (TMD) by changing the SDI Office (SDIO) into the Ballistic Missile Defense Organization (BMDO), which would focus on TMD.⁴³ The BMDO was also dropped in the wiring diagrams—rather than reporting directly to the Secretary of Defense, it would now report to the Undersecretary for Acquisition and Technology. In July the new administration announced that it would hold to the strict interpretation of the ABM treaty, ending the longstanding Russian objections to space-based systems. Such systems would be researched for their technology, but not tested or deployed. The theater systems would be designed to protect American forces, but also would serve to protect regional non-combatants from the escalatory terrorism practiced by Saddam Hussein in the Gulf War. 44

This new focus emphasized that the primary concern would be states like North Korea, not Russia; these regional threats could be met, and proliferation even deterred, with only a theater system. TMD would directly support an interventionist US foreign policy by preserving our ability to operate in regions where ballistic missiles had become dangerous. The DoD cited six examples of recent missile use, all in the Middle East: "the Iran-Iraq War, Libyan attacks on Lampedusa Island, Operation Desert

Storm, the war in Afghanistan, the Iranian attack against dissident camps, and the recent conflict in Yemen."⁴⁶

The only major obstacle to proceeding with TMD was a concern within the United States that even TMD might be seen as a violation of the ABM Treaty. Article II of the Treaty specified, "an ABM system is a system to counter strategic ballistic missiles or their elements in flight trajectory." This left unresolved the definition of a "strategic ballistic missile." In addition, Article VI (a) bound the signatories "not to give missiles, launchers, or radars, other than ABM interceptor missiles, ABM launchers, or ABM radars, capabilities to counter strategic ballistic missiles or their elements in flight trajectory, and not to test them in an ABM mode." Once again, the definitions of "capabilities" and "ABM mode" were left open. Finally, with the collapse of the Soviet Union itself, the status of the treaty as a whole was in doubt. One could now view the treaty as defunct, view Russia as the sole inheritor of Soviet obligations, or view each of the now-independent former Soviet republics as a signatory.

The Clinton Administration's efforts to resolve these questions began with the fourth five-year review of the Treaty by the SCC in September 1993; they ended four years later with the signing of a package of documents that came to be known as the New York Agreements. The initial US position on Article II was straightforward. A "strategic ballistic missile" would be one exceeding the capabilities of the Chinese CSS-2: a range in excess of 3,500 km and a maximum speed in excess of 5.0 km/s. This proposal was quickly accepted by the Russians, and was incorporated into the final agreements.

On the question of succession, Russia made it clear that they wanted other republics, particularly Belarus, Ukraine, and Kazakhstan, to participate. This would maintain the parallelism the Russians and Soviets had placed between the START and ABM talks over the years. More importantly, the former Soviet ABM facilities were now dispersed among its neighbors, especially Kazakhstan. The National Security Council, led on this issue by Bob Bell, recommended acceding to this Russian proposal, and also recommended agreeing to "defer indefinitely discussion of amendments to the ABM Treaty that would allow for more robust NMD architectures." In exchange, in what he called a "grand bargain," the Russians would need to "agree to TMD clarifications that allow the U.S. to execute those TMD programs . . . essential to U.S. national security requirements."

The State Department and ACDA supported this position; their position won out over the Department of Defense's opposition. Officials in the latter saw this as an attempt by both the Clinton Administration and Russia to make future changes to the ABM Treaty more difficult to negotiate. In

hindsight, interpretation of the bargain itself is difficult. Gertz's assessment of it seems to track fairly well with the position of many within the DoD, although few would confirm specific dramatic details of disagreement. In this most negative view, the demarcation negotiations were "a grand scheme ... a prescription for a national security disaster."⁴⁸ On the other hand, it is difficult to see what the United States lost in the process. The Clinton Administration had already determined that it would not be actively pursuing any NMD projects that would require amending or ending the ABM Treaty, so the United States was not giving anything up by agreeing to "defer" doing that. Likewise, the Russian insistence on multilateralizing the treaty seemed non-negotiable on their part. If we wanted to demark TMD once and for all, then the Russians would need to be offered something. While Gertz is correct in pointing out that the Russians had not (yet) raised objections to the TMD systems under development, and so in principle they were given "a blank check to stymie development of American missile defenses,"49 the result of the negotiations described below was much less dramatic: all US TMD systems ended up being accepted as in compliance, and future, more capable systems were left in a gray area, just as before. Furthermore, the signed agreements never were submitted for the Senate's consent. While under international law the United States should be behaving as if they were ratified, pending their rejection, the Bush Administration's high-profile efforts to amend the ABM Treaty have been bilateral with Russia, ignoring the other three successor states.

The most serious question at the demarcation talks was how to define the Article VI(a) provisions. The United States proposal was straightforward: "testing in an ABM mode" would be testing a system against targets traveling in excess of the strategic speed of 5.0 km/s. If one does not test the systems in an ABM mode, then one could assume that they would not have "capabilities to counter strategic ballistic missiles," since no state would depend on such an untested system for its security.

The Russians disagreed with the second half of this argument, and so rejected the proposal.⁵⁰ They argued that if one conducted robust tests of a system against non-strategic targets, one could extrapolate a measure of effectiveness against strategic missiles. Their counter-proposal was to limit the speed of the interceptor to 3.0 km/s. This definition would preserve the Army's Theater High Altitude Area Defense (THAAD) and Patriot Advance Capability (PAC-3), so the American negotiating team, led by Stan Riveles, was inclined to accept it.

The 3.0 km/s proposal led to intense interagency disagreement. Part of the JCS opposition was on a matter of principle: Setting a capability limit, as opposed to an effectiveness limit, would shackle their ability to develop

better (faster) TMD systems. The opposition was also based on programs under development. Both the Navy Upper Tier and the Air Force's Boost Phase Interceptor (BPI) were planned to have higher interceptor speeds, and would be prohibited under the Russians' proposal. Both the Air Force and Navy formally opposed the plan; the Army did not join them. For the next several years, Riveles' team worked to persuade either the Russians to drop their proposal or the Pentagon to drop its opposition.

Ultimately, the specific problem with the Navy and Air Force programs resolved itself. The BPI was cancelled because it did not seem technically feasible. After a congressionally mandated study in 1995, following the transfer of Congress to Republican control, the Navy Upper Tier was declared compliant despite its interceptor speed. Since it was designed to be integrated with the limited-range Aegis system, it would not be able to detect and successfully engage an incoming target moving at strategic speeds.

While the specific practical impact of the 3.0 km/s interceptor speed limit was now moot, the principle remained. Riveles' team offered two major concessions to the Russians in an attempt to induce compromise from them. Each of these became the focus of further interagency debate.

First, the United States agreed to specifically prohibit all space-based components of an ABM or TMD system. This decision was announced at the April 1996 summit. The JCS in particular had wanted to retain the option, but ultimately they conceded the point as an acceptable trade for lifting the TMD interceptor limit. Some within the DoD were more concerned with style of the announcement itself—since missile defense had not been on the agenda for the summit, no military representative was present when the final decision was reached. As it turned out, the concession was pocketed without an agreement by the Russians to drop the 3.0 km/s position.

With this as context, the JCS staff also opposed offering the "no plans" statement. In this statement, both the United States and Russia agreed that they were not planning before April 1999 to test systems with interceptor velocities in excess of 3 km/sec, to develop systems with somewhat faster velocities (4.5 km/sec for sea-based, 5.5 km/sec for others), or to test these against MIRVs. In retrospect, JCS opposition was probably ill-advised, since they had no firm grounds for it. They had, in fact, no plans for such tests during that time. Furthermore, legally, such a statement is not binding. Once again, however, a principle was involved: The statement would be politically binding in this country, and so it represented a concession without compensation.

In the end, the talks proved anti-climactic. As signed in New York on 26 September 1997, the set of agreements did not represent much progress over where matters stood when President Clinton took office. Most significant was the Memorandum of Understanding on Succession (MOUS), indicating that Belarus, Ukraine and Kazakhstan had inherited obligations along with Russia. While this did multilateralize the treaty, it also recognized reality: With the old Soviet system dispersed, the ABM Treaty limits would now apply to the same territory. Belarus could not build its own strategic missile defense system unless Russia dismantled the one around Moscow.

The New York Agreements left interceptor velocities unlimited in practice. In the First Agreed Statement (FAS), all parties agreed that a system would be considered a theater system, or more properly would not be considered a strategic system under Article VI(a) of the ABM treaty, if "the velocity of the interceptor missile does not exceed 3 km/sec over any part of its flight trajectory; the velocity of the ballistic target-missile does not exceed 5 km/sec over any part of its flight trajectory; and the range of the ballistic target- missile does not exceed 3,500 kilometers." The United States stated that the Patriot PAC-3, THAAD, and Navy Area-Wide systems all met these provisions. ⁵²

The Second Agreed Statement (SAS) addressed systems with interceptors faster than 3 km/sec. Such interceptors could not be tested against ballistic missiles whose range or velocity exceeded the limits of the FAS. Beyond that testing limit, review of disputed TMD systems would remain with the SCC. In other words, after four years, no clear demarcation was set forth. The SCC agreed, as part of the Agreement on Confidence Building Measures, to exchange data and test notifications on the THAAD and Navy Theater-Wide (formerly Navy Upper Tier) systems, which the United States asserted were ABM-compliant, even though the latter would exceed the interceptor velocities of the FAS.⁵³

Furthermore, the SAS stated that the signatories would not "develop, test, or deploy space-based interceptor missiles to counter ballistic missiles other than strategic ballistic missiles, or space-based components based on other physical principles." All space-based interceptors were assumed to travel in excess of 3 km/sec in the fourth common understanding attached to the FAS.

The New York Agreements have not been submitted to the Senate for consent, and there is at this writing no indication that the George W. Bush Administration intends to do so. As noted in the first section of this chapter, the Duma made its ratification of START II contingent on the United States ratification of the New York Agreements. That, perhaps, is

the only real legacy of ABM demarcation: the Russians achieved their long-standing goal of linking arms reduction to missile defense. On the other hand, the United States gave up very little on its part, other than codifying the strict interpretation of space-based systems under the ABM Treaty. Since under Article 18 of the 1969 Vienna Convention on the Law of Treaties, "a State is obliged to refrain from acts which would defeat the object and purpose of a treaty," the United States is restricted from building space-based systems until and unless the government formally repudiates the agreements. ⁵⁵

NMD re-emerges—3+3 and Taepo Dong, 1998-2000

The focus on TMD under Clinton was based on the belief that a direct threat against the United States was many years away. Folitically, he could not completely neglect missile defense once the Republicans gained control of both houses of Congress in 1994. So during the 1996 re-election campaign, he proposed what came to be called the "3+3" program. Three years of development, beginning in 1997, would be followed by three years of deployment, with a minimal ABM-compliant system operational in 2003.

Once re-elected, the program began to slide toward the future. The 1997 DoD Report said that a threat to the continental United States was 15 years away, and that even the North Korean Taepo Dong 2 missile was five years from operation (just as it had been the year prior). By the following year, the threat to the continental United States remained 15 years away, and Taepo Dong 2 was now seven years from operation. Thus a "national missile defense program" could wait until 2005 to be operational. North Korea's 31 August 1998 launch of their three-stage missile disrupted these plans.

At their summit in June 1999, Clinton and Yeltsin agreed to re-open discussions on the ABM treaty, along with START III. NMD remained three years away, and would not be fully operational until 2007, but the DoD recognized now that "NMD deployment would require modifications to the treaty," and so the United States has "begun to engage the Russians and allies on the need to change the ABM Treaty to permit deployment of a limited NMD system." While Clinton remained in office, these discussions did not produce results. In September 2000, Clinton declined to make a decision on NMD deployment, based on the administration's assessment of the threat, the status of the technology status, and the impact of such a decision on arms control efforts. 61

Summary of Missile Defense

While issues relating to missile defense were without a doubt the most active aspect of arms control during the first decade after the Cold War, the activity should not be confused with accomplishment. In 1989, President Bush was working to persuade Moscow that the ABM treaty should be revised significantly to address the current threats. In 2001, President Bush was working to persuade Moscow that the ABM treaty should be revised significantly to address the current threats. The only change was that other countries' missile technology was 12 years more advanced, and two more states had declared their nuclear capabilities.

Even if the demarcation agreements had been ratified, one cannot see them as significant. The four years of negotiations had left the Russians and Americans where they started on TMD: Below a certain interceptor threshold, a system clearly lacked strategic defense capabilities; anything above that threshold would be subject to review. Even the American concession on space-based interceptors only accepted the treaty interpretation held by the Russians. They would have seen space-based interceptors as a violation of the ABM treaty in any case. The New York Agreements just clarify that either the Russians must accept them in the future, or the Americans would need to withdraw from the treaty to deploy. The successor states agreement also only recognized that former Soviet assets were dispersed. In principle Belarus, Ukraine, or Kazakhstan could block an American-Russian modification to ABM; the distribution of power among the states, however, suggests that such a gambit would fail. The most significant missile defense decision of these 12 years—and even it has not been ratified—is accepting a common definition of a strategic ballistic missile target.

NON-PROLIFERATION⁶²

As noted in the introduction, non-proliferation efforts were at the center of the Clinton Administration's arms control program. Secretary of State Warren Christopher told the North Atlantic Council on 2 December 1993 that the "most urgent [challenge for the Alliance] is curbing the spread of weapons of mass destruction and the means of delivering them. This threat constitutes the arms control agenda of the 1990s." In February 1994, the NSC defined "counterproliferation" as a two-step process. First, it included measures designed to prevent proliferation by removing the incentive to do so, and to stop the proliferation if it is not prevented. The second step was to deter all use of weapons of mass destruction, via threats of retaliation if

necessary.⁶⁴ This section will not look at all aspects of counterproliferation, since clearly not all of them fall into the scope of "arms control." Four treaty negotiations were involved, however, and will be covered below. These included extending the NPT, negotiating a CTBT, and developing verification or compliance procedures for the CWC and BWC. Each of these treaties intends to discourage the development of such weapons, and to detect attempts to do so. They are unusual, compared to the Cold War treaties, in that each of them is multilateral—they required the agreement of many states around the world. As we leave the clarity of the bipolar world, however, such multilateral negotiations are likely to become increasingly common. Even with strategic arms, we are approaching the point where nuclear states other than Russia and the United States will be participating.

Before discussing those four treaties, one other counterproliferation effort is worth mentioning. As the Soviet collapse became imminent, Senators Richard Lugar (R-IN) and Sam Nunn (D-GA) initiated a program to keep Soviet nuclear weapons "under secure and responsible control" and also reduce the chance that Soviet nuclear scientists and engineers would "seek employment abroad." Of the 30,000 former Soviet weapons, the Nunn-Lugar CTR program was most concerned about the 3,200 outside Russia. 66 While the program began in fall 1991, funds were not used until 1993. The Clinton Administration supported it from the beginning—on 22 March 1993, Christopher referred to the \$800 million program as "a direct investment in our own security." On October 23 of that year, Christopher told a Moscow audience, "It is in our shared interest to prevent the proliferation of nuclear weapons within the former Soviet Union. Proliferation would increase both the risks and the costs of conflict among the new independent states." Among other things, Nunn-Lugar directly employed former Soviet nuclear scientists, funded disarmament and storage facilities, and bought fissile materials from the former Soviet states.⁶⁹

Nuclear Non-Proliferation Treaty Extension

The most straightforward counterproliferation negotiation during this era was the extension of the NPT, mandated for 1995 in the original treaty. Like all other agencies, the DoD was "strongly behind the U.S. position to support indefinite and unconditional extension of the Treaty." With the NPT extension, all the action was on the international side of the negotiations. Three alternatives to "indefinite and unconditional extension" were on the table. One was a second 25-year extension, which some feared would end the treaty with its expiration. A second was for there to be multiple extension periods, punctuated by reviews. The third option was

that the nuclear states would need to finally take action toward disarmament or the treaty would be void.⁷¹

On 11 May 1995, the review conference did, without a formal vote, agree by consensus on the extension. This extension did not require separate Senate consent, since Article X of the original NPT provided for this conference and extension. As a price for agreement, the non-nuclear weapons states called for Israel to be required to join; the U.S. countered by asking that all Middle Eastern states declare themselves nuclear-free. The NPT extension also called for implementation of a comprehensive test ban. While this provision was non-binding, it set the stage for somewhat more conflictual interagency diplomacy.⁷²

Comprehensive Test Ban Treaty

Of the non-proliferation efforts, the negotiation of a CTBT prompted the greatest Interagency debate. During the bipolar era, the DoD position, supported by the NSC, was simply that testing was needed to maintain a deterrent force. While interested in ratifying both the 1974 Threshold Test Ban Treaty (TTBT) and the 1976 Peaceful Nuclear Explosions Treaty (PNET), the DoD "strenuously opposed congressional efforts to limit further our nuclear weapons testing." In principle, a comprehensive test ban might be a good idea, "such a ban, however, can be realized only when we do not need to depend on nuclear deterrence to ensure international security and stability."73 Negotiation on verification protocols for both the TTBT and PNET were signed at the Washington Summit in June 1990. With September Senate consent, they entered into force on 22 December 1990.⁷⁴ With this complete, "The United States has not identified any further restrictions on nuclear testing beyond the TTBT that would be consistent with our national security requirements to maintain a safe and credible nuclear deterrent."75

The changing strategic environment, however, undermined this long-standing position. In September 1992, Senators Hatfield, Exon, and Mitchell led Congress to impose a testing moratorium through the following July. After that, 15 total tests would be allowed through September 1996, followed by a complete ban "unless another state tests after that date." The DoD, still under the leadership of Dick Cheney, objected that testing was still needed to "maintain and improve the safety and reliability of our forces." President Bush signed this moratorium, however. The Department of Energy disagreed with the extent of needed testing. More significantly, with the sudden end of the Cold War, there were no new weapons in development. With defense policy moving away from reliance

on nuclear deterrence, and with non-proliferation receiving more emphasis, a comprehensive test ban seemed more realistic.

President Clinton's inauguration, and the appointment of Les Aspin to the Pentagon, cemented the shift in viewpoint. Aspin's department advocated a CTBT to "strengthen the global norm against the proliferation of nuclear weapons and constrain development of nuclear weapons capability in proliferant states and the nuclear weapons states." With the administration officially united in favor of a comprehensive ban, the only remaining problem heading into the Conference on Disarmament was defining "comprehensive."

The TTBT and PNET had allowed individual tests with a yield under 150 kilotons. Initially, the American position for CTBT was to allow tests with yields under 4 lb (1.8 kg). Such "hydronuclear experiments," in which fissile material was added slowly to the reaction, were a legacy of the Eisenhower Administration's testing. In practice, such tests would be well under a four-pound yield, but that was the safety limit that would only be violated in one of a million experiments. The other declared nuclear weapons states wanted even higher limits, as high as 300 tons in the French case.⁷⁸

In the wake of French nuclear tests in 1995, the Interagency Group briefly considering proposing a 500-ton yield. Both JCS and the State Department argued for this. The advantage would be that very few tests would be required, compared to ones with an even lower threshold. The disadvantage, and of the 4-lb limit as well, was trying to convince the world that a comprehensive ban had been achieved. OSD, now under William Perry, preferred a true zero-yield option. On 11 August 1995, Clinton adopted that preference, which was shared by ACDA and the NSC, deciding that the United States position would be for zero-yield. This was politically acceptable domestically and internationally—France and the UK were unwilling to resist the proposal, and China had been calling for it (perhaps insincerely) for some time. Russia finally agreed in May 1996.

Beyond the politics, which is always a valid negotiating concern, an arms control rationale could be built for the true zero-yield option. In practice, this meant that no self-sustaining reactions would be permitted. With no positive yield permitted, this would effectively eliminate the breakout potential of a nuclear program. This would counter proliferation more effectively than the higher-yield option. The four-pound experiments would be virtually impossible to detect in isolation, but one could hope to be able to detect the long series of tests needed to gain useful weapons knowledge from such tests.

While all had agreed in May to the zero-yield, bargaining over the inspection regime delayed signing until 24 September 1996—one week before the United States moratorium was set to expire. The Western powers wanted inspections to be allowed based on any relevant intelligence information. Such inspections could be blocked by a "red light" from the CTBT Executive Council. China, on the other hand, wanted inspections only with a supermajority "green light" from the Executive Council. In a compromise, the Chinese accepted the use of national technical measures along with the international monitoring system, and the United States accepted the Chinese "green light" proposal. 80

The CTBT would go into force only with the signatures of 44 specific states. Forty-one have signed; India, Pakistan, and North Korea are the holdouts. Holdouts. Holdouts. Holdouts. President Clinton responded by stating that the United States would comply anyway, and a moratorium on testing remained in place for the remainder of his term. Like the New York Agreements, the status of the CTBT for the United States remains indeterminate. While the Senate rejected the treaty, President Clinton's subsequent reaffirmation may again require the United States to follow the Vienna Convention on the Law of Treaties and not violate the terms of the treaty pending another attempt to persuade the Senate to consent to its ratification.

Chemical and Biological Weapons

On paper, at least, the executive branch has remained united in favor of prohibiting both chemical and biological weapons, in an effort to reduce the risk of proliferation. The DoD was dismantling its systems by 1990, so it was easy to assert that it was "committed to negotiating a comprehensive, effectively verifiable, and truly global ban on chemical weapons at the 40-nation Conference on Disarmament (CD) in Geneva." The bilateral agreement at the June 1990 Washington summit to reduce stockpiles to 5,000 agent tons by 2002 would be a good example for a comprehensive effort. When the Gulf War, proposed a global CWC to be completed within 12 months, there was little interagency objection. In his proposal, Bush waived even the right to retaliate in kind to a chemical attack. While he missed his 12-month goal, the CWC was completed on 3 September 1992; the United States was an original signatory on 13 January 1993.

CWC was unusual in that it was both multilateral and would require concrete action by the signatories. The multilateral NPT had not required the United States or other nuclear "haves" to do anything with their existing arsenals, other than discuss arms reduction. CWC avoided this dichotomy. While the states without chemical weapons would be obliged to refrain from developing them, those with such weapons would need to dismantle them. Twelve "Schedule A" chemicals, considered "weapons" such as sarins, ricins, and mustards, would be destroyed within 10 years. Three other lists of chemicals, dangerous but with some legitimate commercial value, would also be subject to controls.⁸⁷

A complex inspection regime was designed to ensure that the CWC was followed. Challenge inspections could be conducted at any time, but following certain rules at the insistence of DoD. While a challenge team could be in-country within 12 hours, and at the plant in 48 hours after the challenge was issued, inspections inside the plant would not begin until 108 hours (4 ½ days) after the challenge.⁸⁸ The inspections would be managed, allowing some control over access to sensitive but non-prohibited activity.

With the agencies solidly behind the CWC, once the use of riot control agents by downed pilots was agreed upon, its ratification seemed assured. This was not, however, a priority for the Clinton Administration, and so it was not until 1995—with 47 of the required 65 ratifications made—that the treaty was submitted to the Senate. By this time, control of Congress had passed to the opposition Republicans, who were in no hurry to consent to the treaty (even though it was negotiated and signed under Bush). Senator Bob Dole officially came out against the CWC in his 1996 presidential campaign; the vote was delayed until the following Congress. In the meantime, Hungary became the 65th ratifier on 29 October 1996—so the CWC, and its commercial penalties against non-ratifiers, would go into force with or without the United States at the end of April 1997.

Ultimately, the Senate consented to the treaty four days prior to its entry into force. Part of the delay was partisan—Senator Jesse Helms of North Carolina, for example, wanted the US Information Agency and ACDA merged into the State Department. Among the greatest concerns against the treaty, which will hold true in future comprehensive arms control agreements, was its impact on the economy and on the rights of private industry. In this case, the Chemical Manufacturers Association (CMA) supported the ratification. The CMA represented the largest companies and represented about 95% of the relevant capacity. It regarded the odds of inspection at any plant as low enough to be acceptable; the many smaller chemical firms disagreed. Despite the cost and inconvenience of inspection, however, the technical risk from it was low. There was relatively little that a foreign inspection team could steal from a chemical plant, since most chemicals are not patented, and the manufacturing process itself would be shielded.

These considerations did not apply to implementing the 1975 BWC. Within the Interagency Group, only the NSC, representing the President's position, preferred moving ahead on verification. The others were united on the common position was that the BWC could not be verifiable. There are just too many small facilities capable of creating toxins, many of which also would have dual uses. At best, the United States could work toward a compliance mechanism. The Commerce Department also weighed in on the debate, reflecting concerns of the pharmaceutical industry. Unlike the chemical industry, this sector was united against BWC inspections. Even familiarization visits could afford the opportunity to steal patented compounds. The majority opinion in this case carried the government position. The United States, unlike the rest of the world, rejected all proposed BWC texts, through the end of the Clinton Administration.

Summary of Non-Proliferation

The post-Cold War record with non-proliferation, as with missile defense, is mixed. On paper, a great deal was accomplished. None dissented on the extension of the NPT. None in the executive opposed the CWC. By the time it was signed, all agreed on the zero-yield solution to the CTBT. Even the "failure" to achieve a compliance protocol on the BWC met the Clinton Administration's position in opposition to all such proposals. The results also appear good. Weapons of mass destruction were not used by states. As far as is publicly known, at least, the dangers of uncontrolled Soviet nuclear weapons also have been averted.

On the other hand, during this time both India and Pakistan announced their nuclear capabilities. Suspicions remain about nuclear programs in both North Korea and Iran. With the expulsion of UN Special Commission (UNSCOM) inspectors, Iraq also must be viewed as a possible proliferator. And within the United States, the Senate rejected the CTBT.

IMPLICATIONS FOR US POLICY AND STRATEGY

The record of these 12 years suggests that arms control met most of its goals. Reductions in strategic arms, renewed regimes against proliferation of weapons of mass destruction, and legitimization of theater missile defenses all contribute to reducing the damage of war if it occurs. By eliminating whole classes of weapons, economic savings were also achieved. In so far as these agreements hold, the chances of war are also reduced somewhat—an adversary equipped with WMD would be more likely to initiate conflict than one that is not.

Even so, it is clear that more could have been achieved. Few agreements were ratified and placed in effect; no agreement was both negotiated and ratified during the Clinton Administration. Repeatedly, the persons involved in these agreements cited a lack of presidential leadership as a major problem. One example of this is the lack of ratifications—Clinton did not move as quickly as Bush did to secure the gains of the early Yeltsin years. By 1995, both he and Yeltsin faced uncooperative and suspicious legislatures. Many of those interviewed noted an additional, more corrosive effect of this lack of leadership. While the NSC typically represents the President's interests, many came to view the NSC as reflecting the personal preferences of its staff. Whether this sentiment was valid or not, it became difficult for the NSC to play its official role as a broker among the other agencies.

As we move into the George W. Bush Administration, the future of arms control seems likely to be different. He has begun to implement the notion of strategic sufficiency, in which the United Sates maintains only the number of nuclear weapons it deems necessary. On 13 November 2001, he made a unilateral commitment to reduce nuclear weapons, down to a total of 1,700—2,200 deployed warheads, "a level," he said, "fully consistent with American security."96 This announcement was followed later that day by a commitment by Russian President Vladimir Putin to cut Russian weapons by two-thirds. ⁹⁷ Putin indicated a strong preference for a signed agreement, which Bush resisted. On this issue, Bush overruled the position of Admiral Richard Mies, then CINCSTRAT, who was concerned about the future of the nuclear triad. 98 Secretary of Defense Donald Rumsfeld has worked with the Senate to lift the restrictions imposed on reducing the arsenal below the ratified START I limits; while at this writing the House had only agreed to finally allow the elimination of the 50 MX missiles, it is probable that unilateral reductions will be permitted for this president.⁹⁹

If the November 2001 meetings in Washington and Crawford, Texas, were designed to get Russian approval of missile defense, they were less successful. While Putin hinted that some additional compromises on testing could be worked out, he reaffirmed the need to keep the ABM treaty. As of this writing the Bush Administration has pressed forward on testing with no announcement regarding withdrawal from the treaty. For both strategic offenses and defenses, and the remaining multilateral agreements, it will remain important for the OSD and JCS to ensure that their positions are considered within the government whether arms control remains informal or becomes more structured once again.

NOTES

¹ In Warren Christopher's book on his time as Secretary of State, if you look up "arms control" in the index you find "see non-proliferation." Warren Christopher, *In the Stream of History: Shaping Foreign Policy for a New Era* (Stanford: Stanford University Press, 1998), 573.

² Stephen J. Hadley, "Arms Control and the Bush Administration," in Kenneth W. Thompson, ed., *Presidents and Arms Control: Process, Procedures, and Problems* (Lanham, MD: University Press of America, 1997), 60.

³ Jeffrey D. McCausland, "Conventional Arms Control," in Jeffrey A. Larsen and Gregory J. Rattray, eds., *Arms Control: Toward the 21st Century* (Boulder: Lynne Rienner, 1996), 144-6.

⁴ Department of Defense Annual Report, 1993, 16.

⁵ Sidney Graybeal and Patricia McFate, "Presidents and Arms Control," in Thompson, ed., *Presidents and Arms Control*, 72.

⁶ Department of Defense Annual Report, 1991, 5.

⁷ Department of Defense Annual Report, 1993, 14.

⁸ Department of Defense Annual Report, 1995, 79.

⁹ Department of Defense Annual Report, 1994, 47; Department of Defense Annual Report, 1995, 60.

¹⁰ Department of Defense Annual Report, 1996, 61.

¹¹ In this section, interviews included, but were not limited to, Mark Schneider, Kerry Kartchner, Forrest Waller, Susan Koch, Lucas Fisher, Linton Brooks, David Hodson, Stan Riveles, and Rich Davidson.

¹² Kerry M. Kartchner, *Negotiating START: Strategic Arms Reduction Talks and the Quest for Strategic Stability* (New Brunswick, NJ: Transaction Publishers, 1992), 3-4.

¹³ Kartchner, 35.

¹⁴ Kartchner, 41-43.

¹⁵ George Bush and Brent Scowcroft, *A World Transformed* (New York: Alfred A. Knopf, 1998), 40.

¹⁶ Department of Defense Annual Report, 1990, 74.

¹⁷ Kartchner, 162-3.

¹⁸ Kartchner, 164.

¹⁹ Kartchner, 209.

²⁰ Most of the details in this section are taken from ACDA factsheet, "Reductions in U.S. and Former Soviet Union Nuclear Weapons," 30 April 1992.

²¹ Department of Defense Annual Report, 1993, 14.

²² Department of Defense Annual Report, 1995, 79-80.

²³ Forrest Waller, "Strategic Offensive Arms Control," in Larsen and Rattray, eds., *Arms Control*, 106-7.

²⁴ Hadley, 59-60.

²⁵ Hadley, 61.

²⁶ Department of Defense Annual Report, 1993, 68.

²⁷ Department of Defense Annual Report, 2000, 69-70.

²⁸ Department of Defense Annual Report, 1998, 58.

²⁹ ACDA factsheet, April 30, 1992.

³⁰ In this section, interviews included, but were not limited to, Stan Riveles, Dr. Susan Koch, Linton Brooks, Lucas Fisher, Mitch Nikolich, Dennis Ward, Col Glenn Trimmer, Dr. Mark Schneider, Lt Col Alan Van Tassel, Lt Col Frank Wolf, and David Hodson.

³¹ Department of Defense Annual Report, 1990, 16-17, 75-76.

³² Kartchner, 246-7.

³³ Department of Defense Annual Report, 1992, 59.

³⁴ Graybeal and McFate, 127.

³⁵ Robert G. Joseph, former Ambassador to the ABM Treaty's Standing Consultative Commission, in statement to Senate Committee on Foreign Relations, 13 May 1999, taken from http://www.fas.org/spp/starwars/congress/1999 h/s106-339-5.htm

³⁶ Department of Defense Annual Report, 1991, 59.

³⁷ Quoted by Stephen Hadley, former Assistant Secretary of Defense, in statement to Senate Committee on Foreign Relations, 13 May 1999, taken from www.fas.org/spp/starwars/congress/1999 h/s106-339-5.htm

³⁸ Hadley, 13 May 99.

³⁹ Hadley, 13 May 99.

⁴⁰ Department of Defense Annual Report, 1993, 73.

⁴¹ Joseph, 13 May 99.

⁴² Janne E. Nolan, "Nuclear Weapons: Is There a Clinton Legacy?" in Thompson, ed., Presidents and Arms Control, 77-93.

⁴³ Graybeal and McFate, 129.

⁴⁴ Department of Defense Annual Report, 1994, 51-6.

⁴⁵ Graybeal and McFate, 130.

⁴⁶ Department of Defense Annual Report, 1996, 221.

⁴⁷ "Presidential Review 31," published by Bill Gertz, *Betrayal: How the Clinton* Administration Undermined American Security (Washington: Regnery Publishing, Inc., 1999), 234.

⁴⁸ Gertz, 59.

⁴⁹ Gertz, 59.

⁵⁰ While the other Soviet successor states participated in the negotiations, there is no evidence that they contributed to the negotiations in an independent manner.

^{51 &}quot;First Agreed Statement Relating to the Treaty between the USA and the USSR on the Limitation of ABM Systems of May 26, 1972," signed 26 September 1997. paragraph 1. ⁵² ACDA Factsheet on the First Agreed Statement of September 26, 1997.

⁵³ ACDA Factsheet on the Second Agreed Statement of September 26, 1997.

⁵⁴ "Second Agreed Statement Relating to the Treaty between the USA and the USSR on the Limitation of ABM Systems of May 26, 1972," signed 26 September 1997, paragraph 2.

⁵⁵ The point of law is in fact even more convoluted: While the United States signed this convention, the Senate did not consent to Article 18.

⁵⁶ Department of Defense Annual Report, 1996, 219.

⁵⁷ Department of Defense Annual Report, 1996, 223.

⁵⁸ Department of Defense Annual Report, 1997, 216.

⁵⁹ Department of Defense Annual Report, 1998, 65.

⁶⁰ Department of Defense Annual Report, 2000, 70-74.

⁶¹ Department of Defense Annual Report, 2001, 95.

⁶² In this section, interviews included, but were not limited to, Rick D'Angelo, Amy Sands, Nicholas Carrera, and Ed Nawrocke.

⁶³ Christopher, 137.

⁶⁴ Virginia I. Foran, "Preventing the Spread of Arms: Nuclear Weapons," in Larsen and Rattray, eds., Arms Control, 191.

⁶⁵ Department of Defense Annual Report, 1992, 3-4.

⁶⁶ Gloria Duffy, "Beyond Defence, Deterrence, and Arms Control." In Nancy W. Gallagher, ed., Arms Control: New Approaches to Theory and Policy (London: Frank Cass. 1998), 76.

⁶⁷ Christopher, 49.

⁶⁸ Christopher, 99.

⁶⁹ Duffy, 77-8.

⁷⁰ Department of Defense Annual Report, 1994, 47.

⁷¹ Foran, 192-3.

⁷² Foran, 194-5.

⁷³ Department of Defense Annual Report, 1990, 77-78.

⁷⁴ Department of Defense Annual Report, 1991. 5.

⁷⁵ Department of Defense Annual Report, 1992. 12.

⁷⁶ Department of Defense Annual Report, 1992, 15-6.

⁷⁷ Department of Defense Annual Report, 1995, 77.

⁷⁸ Rebecca Johnson, "Nuclear Arms control through Multilateral Negotiations." In Nancy W. Gallagher, ed., Arms Control: New Approaches to Theory and Policy (London: Frank Cass, 1998), 88.

⁷⁹ Johnson, 89.

⁸⁰ Johnson, 100-1.

⁸¹ Johnson, 105.

⁸² Department of Defense Annual Report, 2001, 93.

⁸³ Department of Defense Annual Report, 1990, 78.

⁸⁴ Department of Defense Annual Report, 1991, 5.

⁸⁵ Department of Defense Annual Report, 1992, 12.

⁸⁶ Department of Defense Annual Report, 1993, 16; Department of Defense Annual

Report, 1994, 48.

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⁹⁵ Sands is one who has put this view into print.

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